

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

DATE MAILED: 06/09/2004

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/044,275	01/10/2002	Karl F. Popp	19113-1-0031	8435
26135 7	590 06/09/2004		EXAMINER	
LOTT & FRI	EDLAND, P.A.		SHEIKH, H	UMERA N
P.O. BOX 141098 CORAL GABLES, FL 33114-1098			ART UNIT PAPER NUMBER	
CORAL GABI	ES, FE 33114-1070		1615	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
	10/044,275	POPP, KARL F.			
Office Action Summary	Examiner	Art Unit			
	Humera N. Sheikh	1615			
The MAILING DATE of this communication apperiod for Reply	ppears on the cover sheet with t	the correspondence address			
A SHORTENED STATUTORY PERIOD FOR REP THE MAILING DATE OF THIS COMMUNICATION  - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a re  - If NO period for reply is specified above, the maximum statutory perio  - Failure to reply within the set or extended period for reply will, by statu Any reply received by the Office later than three months after the mai earned patent term adjustment. See 37 CFR 1.704(b).	I.  1.136(a). In no event, however, may a reply eply within the statutory minimum of thirty (30 and will apply and will expire SIX (6) MONTHS tute. cause the application to become ABANI	be timely filed  0) days will be considered timely.  5 from the mailing date of this communication.  DONED (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on 10	February 2004.				
, — · · · · · · · · · · · · · · · · · ·					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under	Ex parte Quayle, 1935 C.D. 1	1, 453 O.G. 213.			
Disposition of Claims					
4) ☐ Claim(s) <u>1-4,6-15,17-26 and 28-45</u> is/are pe 4a) Of the above claim(s) is/are withdom  5) ☐ Claim(s) is/are allowed.  6) ☐ Claim(s) <u>1-4,6-15,17-26 and 28-45</u> is/are rej  7) ☐ Claim(s) is/are objected to.  8) ☐ Claim(s) are subject to restriction and	rawn from consideration.				
Application Papers					
9)☐ The specification is objected to by the Exami					
10)☐ The drawing(s) filed on is/are: a)☐ a					
Applicant may not request that any objection to the					
Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the					
	Examiner. Note the attached C	71100 7 (0.1017 6) 101111 1 7 0 102.			
Priority under 35 U.S.C. § 119		40(-) (-1) (5)			
12) Acknowledgment is made of a claim for forei  a) All b) Some * c) None of:  1. Certified copies of the priority docume	ents have been received.				
2. Certified copies of the priority docume					
3. Copies of the certified copies of the properties from the International Pure		ceived in this National Stage			
application from the International Bure  * See the attached detailed Office action for a I		ceived.			
See the attached detailed Office action for a r	iot of the continue copies not re-				
Attachment(s)					
1) Notice of References Cited (PTO-892)		nmary (PTO-413)			
Notice of Draftsperson's Patent Drawing Review (PTO-948)     Information Disclosure Statement(s) (PTO-1449 or PTO/SB/Paper No(s)/Mail Date	(	Mail Date rmal Patent Application (PTO-152)			

**Art Unit: 1615** 

#### **DETAILED ACTION**

## Status of the Application

Receipt of the Amendment and Applicants Arguments/Response, both filed 02/10/04 and the Affidavit (Rule 131/132) or Exhibits (5 in total), all filed 11/05/03 is acknowledged.

Claims 1-4, 6-15, 17-26 and 28-45 are pending. Claims 1, 9, 10, 11, 13-15, 28 and 38 have been amended. Claims 5, 16 and 27 have been withdrawn, as requested by Applicant(s). Claims 1-4, 6-15, 17-26 and 28-45 stand rejected.

The 35 U.S.C. §102(b) rejection of claims 1, 12, 13, 15-21, 29 and 38-45 has been *withdrawn* by virtue of the Amendment.

#### Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-4, 6-15, 17-26 and 28-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Czernielewski et al. (US Pat. No. 5,849,776) in view of Buseman et al. (US Pat. No. 6, 495,158 B1).

Art Unit: 1615

Czernielewski *et al.* teach dermatological compositions and methods for treating dermatological conditions comprising formulations based on metronidazole or a combination of metronidazole and clindamycin, wherein the composition is intended as an anti-inflammatory treatment suitable for application by the topical route and whereby the composition can be in the form of ointments, creams, milks, powders, *impregnated pads*, solutions, gels, sprays, lotions or suspensions. These compositions can be provided either in anhydrous form or in aqueous form (see reference column 1, line 46 through col. 2, line 48) and Abstract.

The composition, which is preferable for topical use, contains metronidazole at a concentration preferably of between 0.01% and 5% by weight of the total composition. This range meets the applicant's claimed range of from about 0.1% to about 2% (col. 2, lines 42-48).

The composition may also additionally contain inert or even pharmacodynamically or cosmetically active additives or combination of additives, such as wetting agents, de-pigmenting agents, emollients, hydrating agents such as glycerol, anti-acne agents, preserving agents and stabilizing agents, for example (col. 2, lines 53 through col. 3, line 8).

The examples at columns 3-4 demonstrate the topical anti-inflammatory activity of metronidazole and of a metronidazole plus clindamycin combination.

Czernielewski et al. also teach a method for the treatment of inflammation, which comprises administering an effective amount of metronidazole and a topical pharmaceutically acceptable carrier. The method of treatment comprises treatment for

Art Unit: 1615

various skin diseases accompanied by dermatosis, such as eczema, psoriasis, acne rosacea, acne vulgaris, ulcers, and the like (col. 4, lines 53 through col. 6, line 16).

Czernielewski et al. teach topical administration of metronidazole whereby the composition can be in the form of ointments, creams, milks, powders, *impregnated* pads, solutions, gels, sprays, lotions or suspensions.

Czernielewski et al. are deficient only in the sense that they do not explicitly teach the particular features of the substrate (woven, non-woven, sponge, etc).

Buseman et al. teach an acne patch which comprises a therapeutic formulation of a topical acne drug, a solvent that dissolves the topical acne drug and a pressure sensitive adhesive whereby the patch can be made of various materials, such as woven, non-woven fabrics, natural fibers such as polyester, cotton fibers, polymeric fibers, porous films, or other kinds of matrixes and can further include antimicrobials, such as metronidazole, clindamycin and the like (see reference column 4, line 21 through col. 10, line 67); (col. 18, lines 1-30).

Therefore it would have been obvious to one of ordinary skill within the art to use the teachings of Buseman et al. within the teachings of Czernielewski et al. because Buseman et al. teach a topical therapeutic acne patch device or substrate wherein the patch is composed of various materials (i.e., woven, non-woven fabrics, natural fibers such as polyester, cotton fibers, etc.), which serve to retain the therapeutic formulation and can further include antimicrobial agents (i.e., metronidazole, clindamycin) and similarly Czernielewski et al. teach dermatological compositions comprising

Art Unit: 1615

metronidazole or a combination of metronidazole and clindamycin, wherein the composition is applied by the topical route and can include such forms as ointments, impregnated pads and the like. The expected result would be an improved topically administered dermatological formulation for the effective treatment of a variety of skin conditions, including, acne and rosacea.

Regarding the instantly claimed amounts or percentages of the delivery system, it is deemed obvious to one of ordinary skill in the art that suitable percentages could be obtained through the use of routine or manipulative experimentation, as these are all variable parameters.

## Response to Arguments

Applicant's arguments filed 02/10/04 have been fully considered.

Firstly, the Applicant argued regarding the 35 §102(b) rejection of claims 1, 12, 13, 15-21, 29 and 38-45 over Czernielewski et al. (US 5,849,776) stating, "the scope of Czernielewski has been restricted to combinations of metronidazole and clindamycin". These arguments have been considered. The Czernielewski et al. reference teaches the concept of the use of metronidazole and the "comprising" claim language permits the use of additional ingredients in the formulation, even active ingredients. Additionally, by virtue of the Amendment filed 02/10/04, the 35 U.S.C. §102(b) rejection has been withdrawn. The Office Action has been reformulated to contain a single 35 U.S.C. §103 (a) rejection over Czernielewski *et al.* in view of Buseman *et al.* 

Art Unit: 1615

Secondly, the Applicant argued regarding the 35 §103 (a) rejection of claims 2-11, 14, 22-28 and 30-37 over Czernielewski *et al.* (5,849,776) in view of Buseman *et al.* (6,495,158 B1) stating, "Czernielewski *et al.* lacks critical elements which are present in the present invention. These critical elements are also lacking in Buseman *et al.* The Examiner's refusal under 35 U.S.C. §103 (a) cannot be sustained on the basis of Czernielewski *et al.* alone, nor in combination with Buseman *et al.*"

Applicants arguments have been fully considered but are not found persuasive. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Czernielewski *et al.* is relied upon for their teaching of dermatological compositions comprising formulations based on metronidazole (or a combination of metronidazole and clindamycin), wherein the composition is in various forms, of which, impregnated pads are explicitly included. Czernielewski *et al.* is deficient only in the sense that they do not teach particular features of the substrate (woven, non-woven, sponge, etc). Buseman *et al.* is relied upon to resolve this deficiency of Czernielewski *et al.* by teaching a metronidazole patch made of woven, non-woven fabrics, natural fibers such as

Art Unit: 1615

polyester, cotton fibers, polymeric fibers, porous films, or other kinds of matrixes. Hence, ample motivation is provided by the prior art.

Next, the Applicant argued, "Buseman et al. is ineffective as a reference under 35 §103 (a) as it describes an adhesive 'patch' and not a 'pledget'".

This argument has been fully considered but was not found persuasive. The primary reference of Czernielewski et al. initially teaches the incorporation of active ingredients, particularly, metronidazole in various forms that clearly include "impregnated pads" which are functionally equivalent to non-adhesive impregnated supports. It is not necessary that the secondary reference of Buseman et al. also teach an impregnated support or pledgets, as instantly claimed, since the primary reference adequately recognizes the concept of formulating dermatological active ingredients into impregnated pads. Moreover, Buseman et al. teach the incorporation of metronidazole into similar forms relating to pledgets and teach a formulation in the same field of endeavor, with the same purpose as the Applicants, delivering a dermatological composition effectively. Hence, Applicant's arguments are not persuasive.

Lastly, the Applicant argued "Applicant's date of invention pre-dates *Buseman's* effective date as a reference."

With regards to the Declaration (Exhibits) filed by the Applicant, the Declaration has been carefully considered, however fails to establish completion of the claimed invention, prior to the date of Buseman *et al.* ('158). There is no information that supports a dermatological delivery system that is non-adhesive and manufactured from the materials claimed and contains about 0.1% to about 2% solution of metronidazole.

Art Unit: 1615

The generic concept has not been supported by the Declaration, nor has claims to the additional species limitations. This includes concentrations, supports, % polymer, major solvents and thickness. The evidence fails to establish completion of the invention as claimed prior to 01/19/01 (filing date of Buseman et al.). Hence the instant invention remains obvious and unpatentable over the prior art of record.

#### **Conclusion**

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 1615

Correspondence

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Humera N. Sheikh whose telephone number is (571)

272-0604. The examiner can normally be reached on Monday through Friday from

7:00A.M. to 4:30P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Thurman Page, can be reached on (571) 272-0602. The fax phone number

for the organization where this application or proceeding is assigned is (703) 308-4556.

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the receptionist whose telephone number is (703) 308-

1235.

*hns*(*/\*//(∪ ' June 07, 2004

> \_\_\_THURMAN\_K. PAGE SUPERVISORY PATENT\_EXAMINER TECHNOLOGY CENTER 1600

Page 9